

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch
690 Walnut Ave.St. 150
Vallejo, CA 94592-1133
(707) 649-5453
(707) 649-5493

Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:**Siegenthaler, Peter**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-019136**Date Inspected:** 05-Jan-2011**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1900**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** Li Yang**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** OBG Segment**Summary of Items Observed:**

On this date Caltrans OSM Quality Assurance (QA) Inspector Mr. M. Manikandan was present during the time noted above for observations relative to the work being performed.

TOWER # BAY 11

This QA Inspector witnessed the final bolt tension verification on the grating channel and double diaphragm of lift 4 west tower. The torque wrench S/N was 1003153. The QA Inspector witnessed 10% of the bolts on a random basis and found the tensioning of the bolts appeared to be in general compliance with the contract specifications. The bolt size designations were as follows:

M20 X 60 – DHGM 200010 – 365 NM

M22 X 55 – DHGM 220011 – 457 NM

M22 X 110 – DHGM 220067 – 500 NM

For additional information please reference the pictures below:

OBG # TRIAL ASSEMBLY YARD (12BE-12CE)

This QA Inspector along with QA inspector Mr. Manjunath S Math performed the dimensional survey inspection to verify the root gap and offset on the transverse splice weld of segment 12BE and segment 12CE. The measurements were recorded on a separate sheet and forwarded to team leader for review and disposition. The segment and panel point designations were as follows:

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Segment 12BE to Segment 12CE – PP 114.5 to PP 115

OBG # TRIAL ASSEMBLY YARD (12BE-12CE)

This QA Inspector along with QA Inspector Mr. Manjunath S Math performed dimensional joint survey inspection on the U-Rib to verify the offset using 1 Meter straight edge. The measurements were recorded on a separate sheet and forwarded to team leader for review and disposition. The segment and panel point designations were as follows:

Segment 12BE to Segment 12CE – PP 114.5 to PP 115

This QA Inspector randomly observed the following work in progress:

OBG # TRIAL ASSEMBLY YARD (12AE and 12BE)

The QA Inspector observed the welding operation per the SMAW process on weld joint no. 022 in the (4G) overhead position on edge and side panel piece mark no. SEG3001AA. The location was the complete joint penetration groove weld joining the edge and side panel of segment 12AE at work point E6. The welder ID was 050289. The welding was performed against critical welding repair report B-CWR2684. The ZPMC CWI was identified as Li Yang. The welding variables recorded by QC appeared to comply with the WPS-345-SMAW-4G (4F)-FCM-Repair-1.

The QA Inspector observed the welding operation per the SMAW process on weld joint no. 001 in the (4G) overhead position on edge and side panel piece mark no. CA3002. The location was the complete joint penetration groove weld joining the edge and side panel of segment 12BE at work point E6. The welder ID was 040320. The welding was performed against critical welding repair report B-CWR2684. The ZPMC CWI was identified as Li Yang. The welding variables recorded by QC appeared to comply with the WPS-345-SMAW-4G (4F)-FCM-Repair-1.

OBG # TRIAL ASSEMBLY YARD (12AW and 12BW)

The QA Inspector observed the welding operation per the SMAW process on weld joint no. 021 in the (4G) overhead position on edge and deck panel piece mark no. SEG3004AA. The location was the complete joint penetration groove weld joining the edge and deck panel of segment 12AW at work point W5. The welder ID was 046709. The welding was performed against welding repair report B-WR18909. The ZPMC CWI was identified as Li Yang. The welding variables recorded by QC appeared to comply with the WPS-345-SMAW-4G (4F)-FCM-Repair-1.

The QA Inspector observed the welding operation per the SMAW process on weld joint no. 002 in the (4G) overhead position on edge and deck panel piece mark no. CA3009. The location was the complete joint penetration groove weld joining the edge and deck panel of segment 12BW at work point W5. The welder ID was 046709. The welding was performed against welding repair report B-WR18909. The ZPMC CWI was identified as Li Yang. The welding variables recorded by QC appeared to comply with the WPS-345-SMAW-4G

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(4F)-FCM-Repair-1.



Summary of Conversations:

No relevant conversations were reported on this date.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang 15000422372, who represents the Office of Structural Materials for your project.

Inspected By:	Manikandan,Murugan	Quality Assurance Inspector
Reviewed By:	Peterson,Art	QA Reviewer
